

TABLE I
PERCENT OCCURRENCE OF PREY REMAINS IN
LEOPARD SCATS (10, 20 AND 30; CUMULATIVE)
FROM MAJHATAL HARSANG WILDLIFE
SANCTUARY, INDIA

Prey species	10 scats	20 scats	30 scats
Cattle	30	25	33
Langur	40	30	30
Goral	10	20	30
Dog	30	25	23
Buffalo	30	20	13
Rodents	10	10	10
Goats	0	10	10
Hare	0	0	3
Unknown	0	5	6

high predation on domestic animals, despite there being seemingly abundant wild prey, especially goral. Buffalo remains in the diet indicate scavenging by the leopard — there was high winter mortality among buffaloes during the study period. Local information confirmed that there is no actual predation on buffalo, though cattle are frequently killed.

Our results indicate relatively high predation on goral (Table 1). In another goral area, in Rajaji National Park in the Shiwalik Hills of northwest Himalaya, we had found a total absence of leopard predation on this species (Mukherjee, unpubl. data), where it was among the less abundant species and occurred in more

difficult terrain than the other prey. The majority of prey in Rajaji was formed by the more abundant chital (*Axis axis*). In MHWS, we did not find any remains of barking deer, wild pig, sambar, rhesus macaque, or porcupine, in any of the scats. Except for the last two, these species are uncommon in the study area. It is worthwhile to note the high levels of predation on common langur and a complete lack of it on rhesus macaque. The trend in Rajaji was similar, with no predation on the rhesus macaque, further data on which is yet to be published.

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3. A REPORT ON THE FOOD PLANTS OF SÁLIM ALI'S FRUIT BAT *LATIDENS SALIMALII*

A team of researchers visited the only known roosting cave of the highly endangered and endemic bat *Latidens salimalii* Thonglongya,

on March 23, 1999, as part of the biodiversity assessment programme of Meghamalai region. The cave is situated in a deep gorge in a valley,

near a stream inside the Kardana Coffee estate, right down the Mettala peak (9° 42' N and 77° 24' E) at 460 m above msl. Coffee and other trees constitute the vegetation surrounding the cave, which serves as a night roost or resting place while feeding (Bates *et al.* 1994). The day roost is not known.

In 1972, Kitty Thonglongya described a new genus of bat *Latidens salimalii* (Sálim Ali's fruit bat) endemic to south India, based on one specimen collected by Angus Hutton from High Wavy mountain in 1948. Hutton erroneously identified it as *Cynopterus sphinx sphinx* (Vahl.). Muni and Thomas rediscovered this rare bat in April 1993 (Bates *et al.* 1994), in their preliminary survey of bats of High Wavy mountain. They collected six specimens and gave morphometric and anatomic details of this endemic species. *L. salimalii* is a medium sized fruit bat with an average forearm length of 67.3 mm. It is similar to *Cynopterus sphinx* in size, but without an external tail. The characters are well described in Bates and Harrison (1997). This bat is listed by IUCN as critically endangered (list 1), with small distribution area, decline of habitat and small population (Baillie and Groombridge 1996). It has entered the Guinness Book of World Records (1993) as one of the three most rare bats of the world. The distribution is presently believed to be restricted to a small population in High Wavy mountain. No information is available on its food or on any other ecological aspects. *Latidens* is closely allied to the southeast Asian genus *Penthetor* Anderson 1912 in general similarity of cheek teeth, and to *Thoopterus* Malsche, 1899 on account of similarities in skull morphology (Bates *et al.* 1994). *Penthetor* is known to feed on a wide variety of hard fruits and seeds from forest trees (Mickleburgh *et al.* 1992) and *Thoopterus* has been observed feeding on wild figs (Bergmans and Rozendaal 1988).

Just a few weeks prior to our visit, some other researchers had visited this cave and tried assessing the population using nets and visual

observation (Arogyamoorthy pers. comm.). During this visit, we identified 2 fig and 3 other tree species from fruit parts present in the faecal heaps on the floor of the cave. The species identified were *Ficus beddomi*, *Ficus macrocarpa*, *Diospyros ovalifolia*, *Prunus ceylanicus* and *Eleocarpus oblongus*. All these trees were fruiting around the cave. This is the first report of the food plants of this endangered fruit-eating bat. According to the locals, the bats live there round the year, which implies that food was available throughout the year from fruiting trees in the surrounding forest and estates. Thus, survival of this endangered species, in its sole known habitat, is linked with the survival of these fruiting trees.

Along the valley, tree felling still continues as part of the coffee estate management. In some areas, patches are being replanted by *Erythrina* sp. and Silver Oak *Grevillea robusta*, which are of no use to the bat. If the authorities with the help of the coffee estate management do not take immediate steps to conserve the food plants, the future of this endemic and endangered bat, whose specific name honours a great ornithologist, is in peril. Though access to High Wavy mountain is restricted, habitat destruction and some level of predation by local workers (Bates *et al.* 1994) also pose a serious threat to the species.

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4. ON THE OCCURRENCE OF THE WILD WATER BUFFALO *BUBALUS ARNEE* IN THE BARAK VALLEY DISTRICTS OF ASSAM

(With one text figure)

The Asiatic wild water buffalo *Bubalus arnee* Kerr (*bubalis* Linn.) is in need of urgent conservation attention. Even stray information of both past and present distribution has become extremely important. An account of its status in northeastern India, the only stronghold of the species in the world, is given in Choudhury (1994). Here I report its past occurrence in the Barak Valley of southern Assam, comprising the districts of Cachar, Hailakandi and Karimganj (Fig. 1).

There is no mention of the wild buffalo in the literature of this area, except for a remark in Choudhury (1997a). During various field trips for primates and birds in the 1980s, I received a few reports about the occurrence of wild buffalo, but could not verify them. However, it was during a survey of grasslands as part of the Biodiversity Conservation Prioritisation Project (BCPP) in 1997 (Choudhury, 1997b) that I got concrete reports and could personally verify them. While many of the specimens were found to be mis-identifications of the gaur *Bos gaurus*, three horns of *Bubalus arnee* were examined and measured. Subsequently, only the reports of these reliable observers, who did not confuse gaur with buffalo, were accepted. The records are listed chronologically:

Late 19th Century: (a) I got reports from Karimganj district (A. Munim Mazumdar, ex-hunter, Hailakandi, *pers. comm.*) about the availability of horns. Two horns were examined, a male and a female, near Badarpur. However, both were shot from Jabda *haor* - Andhari *beel* area (24° 55' N, 92° 30' E) of Katigora, Cachar district, in the latter half of the 19th century by the late Hamidur Raza Choudhury. The specimens were magnificent animals (Table 1). (b) One shot dead in 1885-90 from *beel* no.18 near Hasiura (revenue villages: Rajyeshwarpur pt VII & VIII) (24° 35' N, 92° 37' E) by Kutumia Choudhury, who was among the first settlers in Hasiura. The horn was preserved till 1940s (A. Majid Choudhury, Hasiura village, *pers. comm.*).

TABLE 1
MEASUREMENTS (IN CM) OF HORNS
OF WILD WATER BUFFALOES EXAMINED
IN BARAK VALLEY DISTRICTS

	Sp-1 (f)	Sp-2 (m)	Sp-3 (m)
Maximum spread	121.5	129.5	—
Tip to tip (span)	91.0	61.5	—
Sweep (across forehead)	242.0	317.0	—
Girth at base	32.0	50.0	44.5
Maximum length of a single horn	110.0	148.0	122.0

Sp (Specimen)- 1 & 2: Jabda *haor* - Andhari areas, Cachar district; Sp-3: Mahmodpur, Hailakandi district; Sp-3 was only horns without the skull; (m) = Male; (f) = Female.